

AMENDMENTS TO THE SPECIFICATION

Replace the paragraph beginning on page 9, line 11, with the following:

The polymer transistor arrangement 100 has a polymer transistor formed on a substrate 101. Said polymer transistor contains a gate region 106 made of titanium material, which is formed on the substrate 101. A PVP layer (polyvinylphenol) is formed as gate-insulating layer 105 on the gate region 106. The gate-insulating layer 105 is formed by means of the application of PVP material and by means of the photolithographic patterning of the layer of PVP material, as a result of which the gate-insulating layer 105 remains. A first source/drain region 102 made of gold material is formed on one part of the substrate 101 and on one part of the gate-insulating layer 105. A second source/drain region 103 made of gold material is formed on another part of the substrate 101 and on another part of the gate-insulating layer 105. Furthermore, an active pentacene layer is formed on both source/drain regions 102, 103 and on a region of the gate-insulating layer 105 that is arranged between said source/drain regions, the central section of which pentacene layer serves as channel region 104. It should be noted that pentacene is an organic semiconducting material. At least some of the components of the polymer transistor may be printed on. By means of a drive circuit 107, which is electrically coupled to the two source/drain regions 102, 103 and to the gate region 106 by means of electrically conductive coupling means 108, the source/drain regions 102, 103 and the gate region 105-106 are in each case provided with an electrical potential such that the junction between one of the source/drain regions 102 or 103 and the channel region 104 can be operated as a diode.